

CHAPTER 6 - ENVIRONMENTAL COMPLIANCE

6.1 Endangered Species Act

Twenty-five federally protected species occur or may migrate through the lower Colorado River basin. The ESA of 1973 (16 U.S.C. §1532 *et. seq.*), as amended, was enacted to provide a program for the preservation of endangered and threatened species and to provide protection for the ecosystems upon which these species depend for their survival. All Federal agencies are required to implement protection programs for designated species and to use their authorities to further the purposes of the ESA. The Secretary of the Interior and the Secretary of Commerce have the responsibility for the identification of a threatened or endangered species, development of any potential recovery plans, and designation of critical habitat.

The USFWS and the NMFS are the primary agencies responsible for implementing the ESA. The ESA applies to both plant and animal species. The implementing agencies' responsibilities under the ESA include: (1) the identification of threatened and endangered species, (2) the identification of critical habitats for listed species, (3) implementation of research on, and recovery efforts for, these species, and (4) consultation with other Federal agencies concerning measures to avoid harm to listed species (known as Section 7 consultation).

The ESA also calls for the conservation of what is termed Critical Habitat - the areas of land, water, and air space that are essential to the survival of a threatened or endangered species. Critical Habitat includes such things as food and water, breeding sites, cover or shelter, and sufficient habitat area to provide for normal population growth and behavior. One of the primary threats to many species is the destruction or modification of essential habitat by uncontrolled land and water development.

USACE will coordinate with the USFWS and/or the NMFS during the development of each project-specific NEPA document and will enter into Section 7 consultation with the USFWS and/or the NMFS if USACE determines that there is the potential for any project-specific measure to have an adverse impact on a protected species.

6.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA)(16 U.S.U.S.C. §703, *et.seq.*) requires that a construction permit be obtained if the construction activity is scheduled during nesting seasons (March through August). Surveys shall be performed to identify active nests, so that these nests could be

avoided during construction. A mitigation measure that will be considered is scheduling all construction activities outside the nesting season (September through February) to avoid impacts to migratory birds.

6.3 Executive Order 11988

Executive Order (EO) 11988 was considered in the preparation of this PEIS. The objective of the EO is to avoid, to the extent possible, long and short-term adverse impacts associated with occupancy and modification of the base floodplain. Further objectives are the avoidance of direct and indirect support of development in the base floodplain wherever there is a practicable alternative and the protection and restoration of natural floodplain functions. Feasible alternatives may remain that require further evaluation prior to final determination of whether activities proposed within the 100-year floodplain of the Colorado River are compliant with the Executive Order. USACE regulations for the implementation of EO 11988 (ER 1165-2-26) define the base floodplain as the one percent chance, or 100-year floodplain. For the most part, lakes and wetland features and flood damage reduction measures require siting within the floodplain to provide their intended function. Parkways, recreational features and associated support do not need to be located within the floodplain to fulfill their basic purposes. Additional analysis will be required of the USACE and other Federal decision agencies prior to final determination of compliance of various project alternatives with this Executive Order. Review of policy issues associated with the various project proposals being investigated is continuing by USACE higher authority to assure compliance with EO 11988 directives.

6.4 Section 202 (c) of the Water Resources Development Act of 1996

This guidance requires the preparation of a comprehensive Flood Plain Management Plan (FPMP) by the local sponsors for any projects that are cost shared with the USACE. This requirement will have future floodplain impacts within the study area. The project sponsors are required to develop a FPMP within one year after the signing of the Project Cooperation Agreement, and then implement the plan within one year after completion of construction of the project. Thus, cost-sharing sponsors will be required to complete a FPMP for projects prior to the development of any additional USACE projects within their area of jurisdiction.

6.5 Section 176 (c) Clean Air Act

Federal agencies are required by this Act to review all air emissions resulting from Federal funded projects or permits to insure conformity with the State Implementation Plans in non-attainment areas. Within the project area there are currently no non-attainment areas.

6.6 Section 404 Clean Water Act

USACE has been directed by Congress, under Section 404 of the Clean Water Act (33 USC 1344), to regulate the discharge of dredged and fill material into all waters of the United States, including adjacent wetlands. The intent of Section 404 is to protect the nation's waters from indiscriminate discharge of material capable of causing pollution, and to restore and maintain the chemical, physical and biological integrity of these areas. Although USACE does not issue itself permits for proposed activities that would affect waters of the United States, USACE must meet the legal requirements of the Act.

Each of the other potential projects in this PEIS would be evaluated on its own merits as alternatives are selected and plans are firmed. At this point it is presumed that many of the project alternatives would impact jurisdictional areas, including wetlands, and would result in a requirement for USACE to conduct and incorporate Section 404(b)(1) analyses into subsequent NEPA and agency decision documents.

6.7 Sections 9 and 10 Rivers and Harbors Act

Section 9 (33 USC 401) and Section 10 (33 USC 403) of the Rivers and Harbors Act of 1899 direct USACE to regulate all work or structures in or affecting the course, condition, or capacity of navigable water of the United States.

The main stem Colorado River is navigable from the Gulf of Mexico upstream to Longhorn Dam in Austin and commercial navigation does occur on the lower reaches of the Colorado.

Project features implemented in the coastal reach of the lower Colorado River, evaluated in this PEIS could affect navigation. Further evaluation of all main stem alternatives would be required to determine compliance with Section 10.

6.8 Executive Order 11990 – Protection of Wetlands

In addition to Section 404 and EO 11988, EO 11990 for Protection of Wetlands was considered during the evaluation of the proposed program. The purpose of this EO is to assure that Federal

agencies in the process of carrying out their missions, take all reasonable action to preserve and protect the functional values of wetlands. Further project-specific evaluation will be necessary, as the alternatives evaluated in this PEIS would clearly impact jurisdictional areas including wetlands. Wetland impacts would be appropriately mitigated with coordination from state and Federal agencies.

6.9 Executive Order 13112 – Invasive Species

To comply with EO 13112 on Invasive Species (64 FR 6183, February 8, 1999), operation and construction activities will minimize ground disturbance when possible. However, when disturbance is unavoidable, USACE will coordinate with the USFWS and other land managers to determine revegetation measures. Revegetation of disturbed areas to minimize the spread of invasive species will be addressed under project-specific NEPA documents.

6.10 Section 106 of the National Historic Preservation Act

Assessment, avoidance, and potentially, mitigation, of resources identified during future studies that would be impacted by any aspect of the federal projects would be required. For purposes of Section 106 of the NHPA, a programmatic agreement to address types of studies needed and actions necessary to mitigate cultural resource losses is being pursued with the Texas SHPO and Advisory Council on Historic Preservation. Other groups are being consulted with regarding potential properties of traditional significance.

6.11 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act requires USACE to coordinate with the USFWS on water resources related projects to obtain their views toward preservation of fish and wildlife resource values and mitigation of unavoidable impacts. The USFWS has provided information that was utilized during the planning of the PEIS and has assisted in the early planning process for other projects proposed by USACE. Subsequent detailed studies, including development of appropriate fish and wildlife resources mitigation, would be conducted with the USFWS prior to recommendation of any specific project alternative for construction authorization.

6.12 USACE Habitat Mitigation Process

USACE has established a goal of no net loss of resource value for bottomland hardwoods as a part of the planning process. This goal is similar to the mitigation objectives established by the USFWS as part of its mitigation policy. USACE will continue within its planning process to minimize impacts to bottomland hardwoods and to fully mitigate unavoidable losses. USACE will continue to pursue ecosystem restoration activities under the Continuing Authorities Program. Coordination will continue with resource agencies to determine the most efficient use of program resources to maximize forested resource benefits. In particular, efforts will be pursued to minimize fragmentation of forests and to restore linear corridors of sufficient width to be utilized by migratory songbirds and local wildlife.

Recent trends indicate that emergent wetland resources are being conserved or compensatory mitigation has been appropriately required within the study area. Similar to USACE's mitigation policy for bottomland hardwoods, forested wetlands, and riparian corridors, USACE policy specifies no net loss of wetlands. Resource values of emergent wetlands will be considered during the USACE planning process. Wetland restoration in addition to mitigation of unavoidable losses will continue to be supported as project features for USACE projects.

6.13 Coastal Zone Management Act of 1972 – Texas Coastal Management Plan

The Coastal Zone Management Act of 1972 authorizes the federal Coastal Zone Management Program with the daily management activities delegated to the State of Texas through their federally approved Texas Coastal Management Plan (TCMP). Projects that fall within the boundaries of the TCMP will be reviewed for consistency with the goals and policies of the TCMP. The project-specific review of consistency will be submitted to the Texas Coastal Coordination Council for their concurrence.

6.14 Advisory Circular – Hazardous Wildlife Attractants on or Near Airports

The advisory circular provides guidance on locating certain land uses having the potential to attract hazardous wildlife to or in the vicinity of public-use airports. It also provides guidance concerning the placement of new airport development projects pertaining to aircraft movement in the vicinity of hazardous wildlife attracts. The circular provides guidance on wetlands in and around airports and establishes notification procedures if reasonably foreseeable projects either attract or may attract wildlife.

In response to the Advisory Circular, the United States Army as well as other Federal agencies, signed a Memorandum of Agreement (MOA) with the Federal Aviation Administration (FAA) to address aircraft-wildlife strikes. The MOA establishes procedures necessary to coordinate their missions to more effectively address existing and future environmental conditions contributing to aircraft-wildlife strikes throughout the United States. These efforts are intended to minimize wildlife risks to aviation and human safety, while protecting the Nation's valuable environmental resources.

This PEIS involves alternatives that will have to be coordinated with the FAA. Currently the Onion Creek Interim Feasibility Study would need to be coordinated with the FAA because of its proximity to Bergstrom International Airport in the COA. The coordination would take place in the project-specific environmental document as project specific alternatives have not been fully identified. All future tiered documents would undergo coordination with the FAA as per the guidance in the circular if they are located in or around airports or approach or departure airspace.